Municipal Civil Service Commission, Room 103A City Hall, Rochester, New York 14614
The City of Rochester is an Equal Opportunity Employer
Candidates must record Examination number and Title on the Application

Job Title : ENGINEER III/ STRUCTURAL

NON-REFUNDABLE \$15.00

Exam No. : OC-66353

APPLICATION FEE MUST BE PAID

Salary Range : \$62,261 - \$82,095

BY 5:00 PM ON SEPTEMBER 2, 2015

There is no residency requirement for participation in examinations. For all new hires to the City of Rochester, residency in the City of Rochester at the time of appointment for part time, or within one year from appointment for full time, is a requirement per the Residency Requirement Administrative Policy, except for positions specifically exempt under State law or cooperatively governed with Monroe County. Continuous residency is required throughout employment. Copies of the City Residency Requirement Policy are available in the Department of Human Resource Management, 30 Church Street, Rm 103A, Rochester, NY 14614, (585) 428-7115, HR@cityofrochester.gov.

MINIMUM QUALIFICATIONS:

 A. Possession of a New York State Professional Engineers License or possession of a New York State certification for Engineer-In-Training AND three (3) years of civil engineering experience which must have been involved with the design or construction of structures or bridges;

OR

B. Bachelor's degree in Civil Engineering AND five (5) years of *professional civil engineering experience, four (4) years of which must be involved with the design or construction of structures or bridges;

OR

C. Bachelor's degree in Mechanical, or Chemical, Engineering or other closely related degree, AND six (6) years of *professional civil engineering experience, five (5) years of which must be involved with the design or construction of structures or bridges.

*Professional Civil Engineering is experience gained after the degree is acquired and is defined as experience coping with the complexities of public health, sanitation, traffic flow in urbanized areas and city planning. Engineers plan and design bridges, highways, and other means of transportation required to satisfy indentified needs.

SPECIAL REQUIREMENTS:

- 1. New York State Class D Driver's License at time of appointment. This licensure must be maintained throughout employment in this job.
- 2. Employee must provide car for daily use on assignments.

<u>DESCRIPTION OF DUTIES</u>: _This is a professional position in the Department of Environmental Services, Bureau of Architectural Engineering Services. Employees of this class act as project managers for activities associated with the completion of complex bridge and structural design and reconstruction projects, either in the design or construction phase. An employee of this class oversees inspections conducted by City staff and inspectors employed by contractors. Employees of this class have wide latitude in decision-making, with the most critical decisions reviewed by senior staff or the administrative division head. Related work is performed as required.

TYPICAL WORK ACTIVITIES:

Prepares project designs, proposals, and specifications and evaluates contractor's and consultant's designs and proposals for bridge and structural projects;

Analyzes existing structural data about the project site, identifying factors that will affect construction design and scheduling;

Prepares and supervises preparation of plans, layout drawings, specifications, and detail sheets for structural projects including cost estimates for materials and labor:

Coordinates the bid process, evaluating bids, contracts, and supporting documentation to determine compliance with project specifications; Identifies alternative methods for completing a project, and prepares studies showing cost-effectiveness, timetables, and other impacts of each alternative:

Reviews project designs and specifications with design staff and contractors before construction begins, in order to identify possible problems with designs, quantities, or timetables;

Schedules and co-ordinates the work performed by contractors, sub-contractors, utilities, other governmental agencies, and other City divisions in order to assure work progresses in a timely and cost-efficient manner;

Anticipates and plans for temporary connection or loss of various utilities to customers as construction progresses and investigates complaints from the public;

Supervises and conducts physical inspections and tests of construction and materials, noting deficiencies and any corrective actions taken; Oversees the inspection staff and monitors work performed by any inspection staff employed by consultant;

(CONTINUED ON BACK)

Application Deadline: SEPTEMBER 2, 2015

Application must be received or post marked by the application deadline date otherwise this application will be rejected.

Examination Date: OCTOBER 17, 2015 Issue Date: AUGUST 7, 2015

Prepares progress reports regarding the status of projects under construction to document work progress and contractor's compliance to specifications and timetables:

Recommends approval or disapproval of contractors and consultants payments and requests for time extensions; Identifies training needs of technical staff, and recommends personnel actions such as promotion or discipline.

SCOPE OF EXAMINATION: This exam is designed to evaluate knowledge, skills, and/or abilities in the following areas:

- 1. Structural components and principles and practices of building construction These questions test for knowledge of the technical concepts, proper procedures, materials, and computations used in the design, construction, and renovation of buildings and related facilities, including beams, piles, reinforcing steel, columns, floors, foundations, walls, stairways, doors, windows, roofs, and structural standards.
- **2. Drawings, specifications and contract documents** These questions test for knowledge of typical building construction contract and specification requirements; and the ability to read, analyze, and perform computations and quantity and cost estimates based upon technical drawings and plans of various types of buildings and related structures.
- **3. Building structural design, details, specifications and estimates** These questions test for knowledge of the design concepts, materials, proper construction procedures, standards, requirements, and estimating techniques involved with structures and foundations in buildings and related facilities; and the ability to interpret, analyze, and perform computations based on structural plans, details, and technical information.
- **4. Building structural design codes, standards and requirements** These questions test for knowledge and application of those portions of various codes, standards, and requirements that pertain to the structural design of buildings and related facilities, including the current versions of the New York State Uniform Fire Prevention and Building Code, the American Institute of Steel Construction (AISC) Manual of Steel Construction, and the American Society of Civil Engineering (ASCE), and American Society of Testing and Materials (ASTM) standards. Knowledge of structural components and the ability to perform related computations is required.
- **5. Elementary structural analysis used in the maintenance, repair and reconstruction of bridges** These questions test for knowledge of the principles, practices and materials involved in the structural analysis of various types of bridges and bridge designs; and the proper maintenance, repair, and rehabilitation procedures to use to remedy typical bridge structural and aging problems.
- **6. Preparing written material** These questions test for the ability to present information clearly and accurately, and to organize paragraphs logically and comprehensibly. For some questions, you will be given information in two or three sentences followed by four restatements of the information. You must then choose the best version. For other questions, you will be given paragraphs with their sentences out of order. You must then choose, from four suggestions, the best order for the sentences.
- **7. Supervision** These questions test for knowledge of the principles and practices employed in planning, organizing, and controlling the activities of a work unit toward predetermined objectives. The concepts covered, usually in a situational question format, include such topics as assigning and reviewing work; evaluating performance; maintaining work standards; motivating and developing subordinates; implementing procedural change; increasing efficiency; and dealing with problems of absenteeism, morale, and discipline.

Use of calculators is RECOMMENDED for this exam. Candidates are permitted to use quiet, hand-held, solar or battery powered calculators. Devices with typewriter keyboards, "Spell Checkers", "Personal Digital Assistants", "Address Books", "Language Translators", "Dictionaries", or any similar devices are prohibited.

The New York State Department of Civil Service has not prepared a test guide for this examination. However, candidates may find information in the publication "How to take a written test" helpful in preparing for this test. This publication is available on line at: http://www.cs.ny.gov/testing/localtestguides.cfm

WEIGHT: The written test will contribute 100% to the final score.

RATING: This examination will be rated in accordance with Section 23.2 of the Civil Service Law. The provision of the NYS Civil Service Rules and Regulations dealing with the rating of examinations will apply to this exam.

MULTIPLE EXAMINATIONS SCHEDULED FOR THE SAME DAY: If you have applied to take a written test announced by either one or several local jurisdictions (county, town, city) scheduled to be held on the same test date as this written test, you must notify each of the local jurisdictions no later than two (2) weeks before the test date to make arrangements for taking all tests at one test site. All examinations for positions in State government will be held at a State examination center. To notify the City of Rochester that you will be taking more than one exam on the same day, please submit a Cross-Filer form. To access the City of Rochester's Cross-Filer form and other employment forms, please copy the following into your browser: http://www.cityofrochester.gov/article.aspx?id=8589935785

GENERAL INFORMATION:

Applications: Applications may be obtained from room 103A City Hall, 30 Church St., Rochester, NY 14614-1280 or from our website **www.cityofrochester.gov.** A separate application must be completed for each separately numbered examination. Applications must be received by the close of business or postmarked by the Application Deadline date. Late applications will be rejected. Applications must be complete and accurate.

Application Fee: An Examination Application Fee is charged for the City of Rochester to process a candidate's examination application. It is not a fee for the examination itself. Exam applications will NOT be reviewed until exam fee is paid. Late fees will NOT be accepted. Payment Due Date is the same as Application Deadline Date for applications. *There will be no exceptions to this requirement.* There will be no refund of fees if a candidate does not qualify for an exam or if a candidate fails to appear for the examination.

Eligible Lists: Eligible lists contain the names of applicants who have received a passing score on the examination. Lists will be established in rank order, with the highest score being #1. In the case of tied scores, all persons at that score are considered equal. Candidates must be one of the top three candidates to be reachable for appointment. Promotional eligible lists are limited to present employees of the City and take precedence over open-competitive lists. All eligible lists are established for at least one year and may be extended for up to four years. Change of Address: You are required to notify Civil Service of any address changes. Failure to do so may result in your removal from an eligible list.

Admission to the Exam: If you have not received notification of acceptance or rejection for this exam by the Wednesday before the exam date, please notify this office at 585-428-7454. Residency Requirements: There is no residency requirement for participation in examinations Preference in hiring may be given to City of Rochester residents on open-competitive lists pursuant to Section 23 of the Civil Service Law.

Military Candidates: Any candidate on active military duty in the United States Army, Navy, Marine Corps, Air Force or Coast Guard may be eligible for alternative testing dates if necessary. This applies to the State Militia and National Guard if under Federal Control. If alternate testing is by a DD214 or other official military document that substantiates the applicant's active military service at the time of the examination. Alternative testing accommodations will not be honored if requests are made more than 60 days after release from service.

Effective 1/1/98, the State Constitution was amended to permit candidates currently in the armed forces to apply for and be conditionally granted veteran's credit in examinations. Any candidate who applies for such credit must provide proof of military status to receive the conditional credit. No credit may be granted after the establishment of the list. It is the responsibility of the candidate to provide appropriate documentary proof indicating that the service was in time of war, as defined in Section 85 of Civil Service Law, and that the candidate received an honorable discharge or was released under honorable conditions in order to be certified at a score including veteran's credits.

Veterans: To apply for your Veterans' or Disabled Veterans' Credits you must submit an application which can be found at City Hall, 30 Church St., Rm. 103A or on-line at www.cityofrochester.gov, click on Jobs and then the Employment Forms link. Your Veterans' Credits application can be submitted with your exam application, but MUST be submitted PRIOR to the establishment of the eligible list. Veterans' Credits CANNOT be added to your score after the eligible list has been established. Veterans' Credits can only be added to a passing score. You may waive using your Veterans' Credits any time prior to appointment. You many use your Veterans' Credits for hire only once in your lifetime.

Additional Exam Credits: In conformance with section 85-a of the Civil Service Law, children of firefighters and police officers killed in the line of duty shall be entitled to receive an additional ten points in a competitive examination for original appointment in the same municipality in which his or her parent has served. If you are qualified to participate in this examination and are a child of a firefighter or police officer killed in the line of duty in this municipality, please inform this office of this matter when you submit your application for examination. A candidate claiming such credit has a minimum of two months from the application deadline to provide the necessary documentation to verify additional credit eligibility. However, no credit may be added after the eligible list has been established.

Alternate Testing Arrangements: If alternate or special arrangements for testing are required, please indicate that on your application and attach appropriate documentation. A copy of the City of Rochester's Alternate Test Policy is available in Room 103A, City Hall, or from our website. Deadline for requests is two (2) business days after exam.

Preferred List Applicants: Any employee whose name appears on a preferred list, and who submits an application by the deadline, may participate in a promotion examination, if qualified at time of layoff.